

EMSL Analytical, Inc.

307 West 38th Street, New York, NY 10018

Phone: (212) 290-0051 Fax: (212) 290-0058 Email: manhattanlab@emsl.com

201970

Attn: Kim Alvestad

AECOM Technical Services, Inc.

4840 Cox Road Richmond, VA 23060

(804) 515-8305

Phone: (804) 515-8300

Project:

Fax:

60134596/ HELLER HEAT TREATING

Customer ID:.

Customer PO:

Received: -

01/13/10 10:27 AM

EMSL Order:

031000780

EART59

EMSL Proj:

Analysis Date:

1/13/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using **Polarized Light Microscopy**

			Non-Asl	<u>Asbestos</u>	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
AUST PIT II 031000780-0001	AUSTEMPER PIT INSULATION	Gray Fibrous Homogeneous	55% Min. Wool	15% Ca Carbonate 30% Non-fibrous (other)	None Detected
			Now A	SASTOS	

Analyst(s)

Sean Scales (1)

James Hall, Laboratory Manager or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Samples analyzed by EMSL Analytical, Inc. New York 307 West 38th Street, New York NY NVLAP Lab Code 101048-9, AIHA-LAP, LLC--IHLAP Lab 102581, NYS ELAP 11506, NJ NY022, CT PH-0170, MA AA000170

031000780



Asbestos Chain of Custody EMSL Order Number (Lab Use Only):

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Company AECOM	Company : AECOM				EMSL-	Bill to:	Same Different			
Street: 4840 Cox Rd							ote instructions in C			
		T =	•				1	tion from third party		
City: Glen Allen		State/P	rovince: VA	Zip/Postal Cod	e: 2306	0	Cou	intry: USA		
Report To (Name): I				Fax #:						
Telephone #: 804-5				Email Address	: kimt	erly.al	vestad@aecom.com			
Project Name/Numb			g 60134596							
Please Provide Resi	ults: 🗌 Fax	⊠ Email			U.:	S. Stat	te Samples Taken: NJ			
☐ 3 Hours ☐ 6	Hours 🛛	24 Hrs	around Time (TAT)	Options" – Pleas I □ 3 Davs		ck I Days	□ E David	1 1 40 0		
*For TEM Air 3 hours/6 h	ours, please call ah	ead to sch	edule *There is a premiu	n charge for 3 Hour	TEM AU	EDA or	EDA LOVOLUTAT	Variable and adda sing		
PCM - Air	orm for this service.	Analysis	completea in accordance	with EMSL's Terms	and Cor	nditions i	ocated in the Anal	ytical Price Guide.		
☐ NIOSH 7400	•		TEM - Air AHERA 40 CFF	Dort 762			Dust ACTA	D ETEC		
w/ OSHA 8hr. TW/	A		☐ NIOSH 7402	C, Pajt 703		I !	icrovac - ASTM			
<u> </u>	PLM - Bulk (reporting limit)						ipe - ASTM D6	,		
☑ PLM EPA 600/R-93			☐ ISO 10312				Rock/Vermicul	n (EPA 600/J-93/167)		
☐ PLM EPA NOB (<1	` '		TEM - Bulk		·	4		A (0.25% sensitivity)		
Point Count	•	ł	☐ TEM EPA NOB					B (0.1% sensitivity)		
400 (<0.25%) 🔲 1	000 (<0.1%)		☐ NYS NOB 198.4	(non-friable-NY)				B (0.1% sensitivity)		
Point Count w/Gravim	etric		☐ Chatfield SOP	(C (0.01% sensitivity)		
400 (<0.25%) 🔲 1	000 (<0.1%)		☐ TEM Mass Anal	ysis-EPA 600 sec	. 2.5		PA Protocol (Semi-Quantitative)			
☐ NYS 198.1 (friable	•		TEM - Water: EPA	100.2			PA Protocol (Qu			
☐ NYS 198.6 NOB (r	non-friable-NY)		Fibers >10µm	Waste 🔲 Drinki	ing	Othe				
☐ NIOSH 9002 (<1%			All Fiber Sizes							
	☐ Chec	k For Po	ositive Stop – Cle	arly Identify Ho	moge	nous	Group			
Samplers Name: W.H	l. Haynes			Samplers Sign	ature:	W	4/4			
Sample #			Sample Description				me/Area (Air) A # (Bulk)	Date/Time Sampled		
Aust Pit II	Austemper Pit	Inculation						4.4		
	redsemper 7 R	zii suiation	+	· · · · · · · · · · · · · · · · · · ·		Bulk		1-12-10 16:00		
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Client Sample # (a)	W					-		11		
Client Sample # (s):			_			otal #				
Relinquished (Client):	WHHa	/wn n	Pate: /	/12/10	7	otal #	of Samples:	ONE		
Relinquished (Client):		/ WH H.	<u> </u>	12/10	1	otal #				
Relinquished (Client):		/ см н	- 9v∡∫ Date: // Date:	118		otal #	of Samples:	ONE		
Relinquished (Client):		/wn H	<u> </u>	118	1	otal#	of Samples:	ONE		
Relinquished (Client):	eon structions:	/шин	<u> </u>	118		otal#	of Samples:	ONE		

Page 1 of ____ pages



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307 West 38th Street, New York, NY 10018

Phone: (804) 515-8300

Phone: (212) 290-0051 Fax: (212) 290-0058 Email: manhattanlab@emsl.com

Attn: AECOM Technical Services, Inc. 4840 Cox Road

Richmond, VA 23060

(804) 515-8305

Customer ID:

EART59

Customer PO: Received:

12/10/09 10:02 AM

EMSL Order:

030930743

Fax:

60134596/ HELLER HEAT TREATING/ NJ

EMSL Proj:

Analysis Date:

12/10/2009

Sampling Date:

12/8/2009

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

		Volume	Area Analyzed	Non	Asbestos	# Structures		Analytical Sensitivity	Asbe Concen	
Sample	Location	(Liters)	(mm²)	Asb	Type(s)	$\geq 0.5\mu < 5\mu$	≥5μ	(S/cc)	(S/mm²)	(S/cc)
AH-A-A1	OPERIMETER BACKGROUND AIR SAMPLE	405.00	0.1950	0	None Dete	cted		0.0049	<5.10	<0.0049
030930743-0001			• •			•				
AH-A-A2	PERIMTER DOWNWIND BY LOADING DOCK BLDG 5	405.00	0.1950	3	None Dete	cted		0.0049	<5.10	<0.0049
030930743-0002										
AH-A-A3	PERIMETER DOWNWIND BTWN BLDG 1 AND 4	405.00	0.1950	0	None Dete	cted		0.0049	<5.10	<0.0049
030930743-0003	<u> </u>								•	
AH-A-A4	PERIMETER DOWNWIND BTWN BLDG 1 AND 4	405.00	0.1950	0	None Dete	cted		0.0049	<5.10	<0.0049
030930743-0004										
AH-A-P1	PERSONAL AIR MONITORING	345.00	0.2340	0	None Dete	cted		0.0048	<4.30	<0.0048
030930743-0005										
AH-A-P2	PERSONAL AIR MONITORING	339.00	0.2340	17	Amosite	, 0	2	0.0049	8.50	0.0097
030930743-0006										
AH-A-P3	PERSONAL AIR MONITORING	327.00	0.2470	1	Amosite	. 1	1	0.0048	8.10	0.0095
030930743-0007										

Analyst(s)

David Chen (3)

Evie Sioukri (5)

James Hall, Laboratory Manager or other approved signatory

The laboratory is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. This lab is only responsible for data reported in structures/mm*. This report may not be reproduced, except in full, without written approval by EMSL. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the samples reported above. Quality control data (including 95% confidence limits and laboratory and analysts' accuracy and precision) is available upon request. As per 40 CFR 763, the initial screening test may not be applied to samples with collected volumes of <1200 liters. The test results contained within this report meet the requirements of NELAC unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. New York 307 West 38th Street, New York NY NVLAP Lab Code 101048-9, AIHA IHLAP 102581, NYS ELAP 11506, CT PH-0170, MA AA000170



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4840 Cox Road Richmond, VA 23060 Customer ID:

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12/10/09 10:02 AM

EMSL Order:

030930743

(804) 515-8305 Phone: (804) 515-8300 Project: 60134596/ HELLER HEAT TREATING/ NJ

EMSL Proj:

Analysis Date:

12/10/2009

Sampling Date:

12/8/2009

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample		Volume (Liters)	Area Analyzed (mm²)	Non Asb	Asbestos Type(s)	# Structures		Analytical Sensitivity	Asbe: Concent	
	Location					$\geq 0.5\mu < 5\mu$	≥ <i>5</i> µ	(S/cc)	(S/mm^2)	(S/cc)
AH-A-P4	PERSONAL AIR MONITORING	333.00	0.2340	2	Amosite	0	1	0.0049	4.30	0.0049
030930743-0008										

Analyst(s)

David Chen (3)

Evie Sioukri (5)

James Hall, Laboratory Manager or other approved signatory

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Attn: AECOM Technical Services, Inc.

Project: 60134596/ HELLER HEAT TREATING/ NJ

4840 Cox Road Richmond, VA 23060

(804) 515-8305

Customer ID:

EART59

Customer PO: Received:

12/10/09 10:02 AM

EMSL Order:

030930743

EMSL Proj:

Analysis Date:

12/10/2009

Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm²	Fibers/ cc Notes		
AH-A-P1	PERSONAL AIR MONITORING		345.00	20	100	0.008	25.5	0.028		
030930743-0009										
AH-A-P2	PERSONAL AIR MONITORING		····	339.00	67.5	100	0.008	86	0.098	
030930743-0010										
AH-A-P3	PERSONAL AIR	NAL AIR 12/8/2009	327.00	13.5	100	0.008	17.2	0.020		
030930743-0011	MONITORING									
AH-A-P4	PERSONAL AIR MONITORING	12/8/2009	333.00	36.5	100	0.008	46.5	0.054		
030930743-0012										

No discernable field blanks submitted with this sample set.

Analyst(s)

Dariya Chugunova (4)

James Hall, Laboratory Manager or other approved signatory

Limit of detection is 7 fibers/mm². Interlaboratory Sr values: 5-20 fibers = 0.35, 21-50 fibers = 0.30, 51-100 fibers = 0.20. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. New York 307 West 38th Street, New York NY AIHA IHLAP 102581, NYS ELAP 11506, CT PH-0170, MA AA000170



Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

0307 30143 - Teaching REDELECTION OF CHECKEN

EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

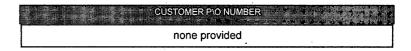
PHONE: (856) 858-4800 FAX: (856) 858-4960

Company : AECOM			EMSL-Bill to: Same Different:					
Street: 4840 Cox Rd			Third Party Billing (reauire	s written authorizati	on from third party		
City:: Glen Allen	State	Province: VA	Zip/Postal Code: 2306		1	ntry:: USA		
Report To (Name): K		r to thio	Fax #:					
Telephone #: 804-51			Email Address: kimberly.alvestad@aecom.com					
<u> </u>		ing:60434596: \	Ellati Addiess. Kimi	JOI				
Project Name/Number	ults: Fax: Ema	ill Purchase Order	7: U.	S. Sta	ite Samples Tak	en: NJ		
			Options* - Please Che					
3 Hours 6	Hours X 24 Hrs	48 Hrs	3 Days	4 Day	s 📗 5 Days	10 Days		
*For TEM Air 3 hours/6 h	ours; please call ahead to so	hedule.*There is a premiu is completed in accordance	micharge for 3 Hour TEM AH e with EMSL's: Terms and Co	IERA o	ri EPA Level III TAT.	You will be asked to sign: tiral Price Guide		
	भं को जो भी भेज कर्ने हिल्की, असंस्कृत				M-Dust			
⊠ NIOSH 7400	• •	AHERA 40 CF			Microvac - ASTM			
WOSHA 8hr. TW	A \	☑ NIOSH 7402	"	1	Wipe - ASTM D64			
	PLMI - Bulk (reporting limit) EPA Level II				Carpet Sonication	n (EPA 600/U-93//167)		
	☐ PLM EPA 600/R-93/116 (<1%) ☐ ISO 10312				I/Rock/Vermicul			
☐ PLM EPA NOB (<1		TEM - Bulk			4	A (0.25% sensitivity)		
Point Count	Table Tabl				1	B (0.1% sensitivity)		
☐ 400 (<0.25%) ☐ 1	000 (<0.1%)	☐ NYS NOB 198	•		4	B (0.1% sensitivity)		
Point Count w/Gravim		☐ Chatfield SOP	•	¥I .	4	C (0.01% sensitivity)		
400 (<0.25%) 1	000 (<0.1%)	☐ TEM Mass Ana	lysis-EPA 600 sec. 2.5		EPA Protocol (Se	mi-Quantitative)		
NYS 198.1 (friable		TEM - Water: EPA	100.2		EPA Protocol (Qu	iantitative)		
NYS 198.6 NOB (non-friable-NY)	Fibers >10µm	Waste Drinking	Other:				
☐ NIOSH 9002 (<1%	55	All Fiber Sizes	Waste Drinking					
		Positive Stop - Cle	arly Identify Homog	enou	s Group			
C			C					
Samplers Name: Kell	III LUCAMMO		Samplers Signature:		ume/Area (Air)	Date/Time:		
Sample #		Sample Description	1)		HA # (Bulk)	Sampled		
a a mark as a stan		e de co				1/2/8/09 13:15 to		
A11-A-A.1	Perimeter, Backgroun	d Air Sample		405	L/min	15:30 2/8/09 13:15 to		
A FT-A-A2	Perimeter, Downwin	d by loading dock Br	uilding 5	405	L/min	15:30		
						2/8/09 13:15 to		
AH-A-A3	Perimeter, Downwind	between bldgs I and 4)	405	L/min	15:30		
AH-A-A4	Perimeter, Downwind	hwantranco to bida A		405	L/mia	2/8/09 13:15 to		
A BOARD AND A COLUMN		of children to order 4	AFFESSA	403	Laterer	15:30) 12/8/09) [3:35] (o)		
AH-A-PI	Personal air monitorin	g gana	9.44.200.4.0.2.2	345	L/min	15:30		
AND ANDS	Daniel Control		MALYSTE SY			12/8/09 13:35 to		
AH-A-P2	Personall air monitorin	g	b z · · · · · · · · · · · · · · · · · ·	339	L/mie	15:30		
AH-A-P3	Personal air monitorin	ę.		327	L./min			
AH-A-P4	Personal air monitorin	9 DEC ! 0	M: 02	333	L/min	12/8/09 13:35 to 15:30		
Client Sample # (s):		Λ -		-	# of Samples:	8		
Relinquished (Client)	: Vellit	MCC Date:	12/9/09		Time			
Received (Lab):	atter	Date:	wholsen		Time	- 4 - 6		
			Dnofrio, USEPA and Ji	m Hal	l	. 10-00-01-mi		
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Controlled Discoment - Asbestos: COC -	F11 - 3/18/2008:	Page 1 ofpag	as:					



PACKING LIST

ORDER NO	DATE	PAGE NO
86045744	12/7/2009	1



BILL TO:

AECOM Technical Services, Inc. 4840 Cox Road Glen Allen, VA 23060

SHIP TO:

AECOM 5 Wellington Street Cliffton, NJ 07011

CUSTOMER NO

EART59

12/8/2009

FeEx Prior Over CINNAMINSON

1.00 8715001B

ASBESTOS TEM 25mm .45 Cassette

/ 50 pk

вх

TOTAL QTY ORDERED



EMSE ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

		· · · · · · · · · · · · · · · · · · ·					
Company :				I to: Same Different rent note instructions in Comments**			
Street:		Third Party Bil	ling requ	ires written authorization from third party			
City:	State/Province:	Zip/Postal Code:	:	Country:			
Report To (Name):	a same	Fax #:					
Telephone #:	***	Email Address:	,				
Project Name/Number:							
Please Provide Results: 🔲 Fax	Email Purchase	Order: U.S	. State	Samples Taken:			
	Turnaround Time (TAT) Options* - Ple	ase Ch	eck			
3 Hours 6 Hours 2	44 Hours 48 Hours RUSH TAT's Please Call.		urś and A	Days 5 Days 2 Weeks			
		\sbestos					
PCM - Air	PLM - Bulk			TEM - Bulk			
□ NIOSH 7400	☐ PLM EPA 600/R-9:			TEM EPA NOB			
w/ 8hr. TWA	PLM EPA NOB (<1		٠.	NYS NOB 198.4 (non-friable-NY)			
TEM - Air AHERA 40 CFR, Part 763	│	•		☐ Chatfield SOP Soil/Rock/Vermiculite			
□ NIOSH 7402	Point Count 400 (1%)	PLM CARB 435 – A (0.25% sensitivity)			
☐ EPA Level II	Point Count w/ Gravin		. , ,	PLM CARB 435 – B (0.1% sensitivity)			
☐ ISO 10312		<0.25%) 🔲 1000 (<0.1	1%)	☐ TEM CARB 435 – B (0.1% sensitivity)			
TEM - Water	TEM - Dust			EPA Reg. 1 Screening Protocol (Qualitative)			
Fibers ≥10µm ☐ Waste ☐ Drinking	☐ Microvac – ASTM I	D 5755		Other:			
All Fiber Sizes	Wipe-ASTM D6480		·	Matariala Caianaa			
	Lead (Pb)			Materials Science			
Flame Atomic Absorption		ICP		Common Particle ID (large particles)			
☐ Chips SW846-7000B or AOAC 974.		7300 Modified Wipe SW846-6010B	or C	☐ Full Particle ID (environmental dust) ☐ Basic Material ID (solids)			
☐ Sill SVV446-7000B/7420		e SW846-6010B or C		Advanced Material ID			
☐ Wastewater SM3111B or SW846-7000		6-6010 B or C	Physical Testing (Tensile, Compression)				
☐ASTM Wipe SW846-7000B/7420			•				
non ASTM Wipe SW846-7000B/7420) U vvaste vva	ter SW846-6010B or	U ,	Combustion-by-products (soot, char, etc.)			
☐ TCLP SW846-1311/7420/SM 3111B		346-6010B or C		X-Ray Fluorescence (elem. analysis)			
Graphite Furnace Atomic Ab		ther:	X-Ray Diffraction (Crystalline Part.)				
☐ Soil SW846-7421 ☐ Wastewate				MMVF's (Fibrous glass, RCF's)			
	ater EPA 200.9			☐ Particle Size (sieve/microscopy/laser) ☐ Combustible Dust			
	icrobiology						
Wipe and Bulk Samples ☐ Mold & Fungi – Direct Examination	Air Samples ☐ Mold & Fungi (S	pore Trap)		☐ Petrographic Examination Other: ☐			
☐ Mold & Fungi Culture (Genus Only)		ulture (Genus Only)	`	IAQ			
☐ Mold & Fungi Culture (Genus & Species)	· I —			Nuisance Dust NIOSH ☐0500 ☐0600			
☐ Bacterial Count & ID (Up to Three Types)	1	R ID (Up to Three Types)		Airborne Dust ☐ PM10 ☐ TSP			
Bacterial Count & ID (Up to Five Types)		& ID (Up to Five Types)		Silica Analysis: All Species			
☐ MRSA	☐ Endotoxin Testi			Silica Analysis – Single Species			
☐ Pseudomonas aeruginosa	Real Time Q-PCR	(See Analytical Guide for	r·Code)	☐ Alpha Quartz ☐Cristobalite ☐ Tridymite			
Water Samples	Code:			☐ HVAC Efficiency .			
☐ Total Coliform & E.coli (P/A)	<u>Legionella</u>			☐ Carbon Black			
☐ Fecal Coliform (SM 9222D)		2 ⊡Level 3 ⊡Level 4		Airborne Oil Mist			
☐ Sewage Screen	Other:	· • · · · · · · · · · · · · · · · · · ·		Radon Testing: Call for Kit and COC			
☐ Heterotrophic Plate Count (SM 9215			,	Other:			
**Comments/Special Instructions:							
Client Sample #'s -			Total	# of Samples:			
Relinquished (Client):	Date:		Time:				
Received (Lab):	Date:		Time:				
	1			• *			



EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAXY(856) 858-4960

Company :			EMSL-Bill to: Same Different If Bill to is Different note instructions in Comments**				
Street:			1 3. 1		uires written authorization from third party		
	State/Dra	· · · · · · · · · · · · · · · · · · ·			Country:		
City:	State/Pro	vince.	Zip/Postal Code:		Country.		
Report To (Name):			Fax #:	·			
Telephone #:	· .	· · · · · · · · · · · · · · · · · · ·	Email Address:				
Project Name/Number:	7 ====:1	Durch see 6	Sedow 111	C C4-4-	Samples Taken		
Please Provide Results: ☐ Fax [Email	Purchase (Samples Taken:		
3 Hours 6 Hours 2	24 Hours	48 Hours	AT) Options* - Ple s		Days 5 Days 2 Weeks		
			ead to Confirm Lab H				
			sbestos				
PCM - Air	PLM - Bu	ılk			TEM - Bulk		
☐ NIOSH 7400		PA 600/R-93/		•	☐ TEM EPA NOB		
□ w/ 8hr. TWA	PA NOB (<1%			NYS NOB 198.4 (non-friable-NY)			
TEM - Air ☐ AHERA 40 CFR, Part 763		98.1 (friable-N 98.6 (non-friab			☐ Chatfield SOP Soil/Rock/Vermiculite		
□ NIOSH 7402			25%) 🔲 1000 (<0.	1%)	☐ PLM CARB 435 – A (0.25% sensitivity)		
EPA Level II		int w/ Gravime	tric		☐ PLM CARB 435 – B (0.1% sensitivity)		
☐ ISO 10312	<u> </u>		<u>.25%)</u>	1%) 🔻	☐ TEM CARB 435 – B (0.1% sensitivity)		
TEM - Water	TEM - Du	<u>ist</u> /ac – ASTM D :	6766		EPA Reg. 1 Screening Protocol (Qualitative) Other:		
Fibers ≥10µm ☐ Waste ☐ Drinking All Fiber Sizes ☐ Waste ☐ Drinking		ASTM D6480	5/55		Other.		
	Lead (PI				Materials Science		
Flame Atomic Absorption			ICP		Common Particle ID (large particles)		
☐ Chips SW846-7000B or AOAC 974.		Air NIOSH 7			Full Particle ID (environmental dust)		
Soil SW846-7000B/7420			/ipe SW846-6010B		Basic Material ID (solids)		
☐ Air NIOSH 7082 ☐ Wastewater SM3111B or SW846-7000		_IASTM Wipe ☐ Soil SW846-	SW846-6010B or C	٠.	Advanced Material ID Physical Testing (Tensile, Compression)		
☐ Wastewater SM3111B 0/ SW040-7000	, - -	-					
☐non ASTM Wipe SW846-7000B/742	o L	_) waste wate	r SW846-6010B or	C ,	Combustion-by-products (soot, char, etc.)		
☐ TCLP SW846-1311/7420/SM 3111E			6-601.0B or C		X-Ray Fluorescence (elem. analysis)		
Graphite Furnace Atomic Al ☐ Soil SW846-7421 ☐ Wastewate	bsorption er EPA 200.		er: 🗆		X-Ray Diffraction (Crystalline Part.)		
	/ater EPA 2				☐ MMVF's (Fibrous glass, RCF's) ☐ Particle Size (sieve/microscopy/laser)		
	icrobiol				☐ Combustible Dust		
Wipe and Bulk Samples	Air Sa				☐ Petrographic Examination		
☐ Mold & Fungi – Direct Examination	☐ Mol	ld & Fungi (Spo	ore Trap)		Other: 📋		
☐ Mold & Fungi Culture (Genus Only)	☐ Mol	ld & Fungi Cult	ture (Genus Only)		IAQ		
☐ Mold & Fungi Culture (Genus & Species)) 🔲 Mol	ld & Fungi (Ge	nus & Species)	* 7	Nuisance Dust NIOSH ☐0500 ☐0600		
☐ Bacterial Count & ID (Up to Three Types			D (Up to Three Types)	Airborne Dust PM10 TSP		
☐ Bacterial Count & ID (Up to Five Types)☐ MRSA		terial Culture & I lotoxin Testing	D (Up to Five Types)		Silica Analysis: All Species		
☐ Pseudomonas aeruginosa			ee Analytical Guide fo	or Code)	Silica Analysis – Single Species Alpha Quartz Cristobalite Tridymite		
Water Samples	Code	<u> </u>	ce Analytical Guide le	, code,	☐ HVAC Efficiency		
☐ Total Coliform & E.coli (P/A)	Legior	nella		•	☐ Carbon Black		
☐ Fecal Coliform (SM 9222D)		☐Level 3 ☐Level 4	4	☐ Airborne Oil Mist			
☐ Sewage Screen	Other:			(.	Radon Testing: Call for Kit and COC		
☐ Heterotrophic Plate Count (SM 9215	5)				Other:		
**Comments/Special Instructions	•			٠,			
Client Sample #'s -				Total	# of Samples:		
	· I	Datoi	 	Total # of Samples:			
Relinquished (Client):		Date:	· · · · · · · · · · · · · · · · · · ·	Time			
Received (Lab):		Date:		Time			



EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
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			1
*Comments/Special	Instructions:		

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide



EMSL ANALYTICAL, INC. 107 HADDON AVENUE WESTMONT, NJ 08108

PHONE: (856) 858-4800 FAX: (856) 858-4960

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
- Cumple II		i i i i i i i i i i i i i i i i i i i	Campiou
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*Comments/Special	Instructions:		
			, 1 , 1 - , 1 +

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide



Fax:

EMSL Analytical, Inc.

307 West 38th Street, New York, NY 10018

Phone: (212) 290-0051 Fax: (212) 290-0058 Email: manhattanlab@emsl.com

Attn: AECOM Technical Services, Inc. 4840 Cox Road

Richmond, VA 23060

(804) 515-8305

Phone: (804) 515-8300

60134596/ HELLER HEAT TREATING/ NJ

Customer ID:

EART59

Customer PO: Received:

12/10/09 10:02 AM

EMSL Order:

030930743

EMSL Proi:

Analysis Date:

12/10/2009

Sampling Date:

12/8/2009

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

	•	Volume	Area Analyzed (mm²)	Non	Asbestos Type(s)	# Structures		Analytical Sensitivity	Asbestos Concentration	
Sample	Location	(Liters)		Asb		$\geq 0.5\mu < 5\mu$	≥5μ	(S/cc)	(S/mm²)	(S/cc)
AH-A-A1	PERIMETER BACKGROUND AIR SAMPLE	405.00	0.1950	0	None Detec	cted		0.0049	<5.10	<0.0049
030930743-0001	,							,		
AH-A-A2	PERIMTER DOWNWIND BY LOADING DOCK BLDG 5	405.00	0.1950	3	None Detec	cted		0.0049	<5.10	<0.0049
030930743-0002										
AH-A-A3	PERIMETER DOWNWIND BTWN BLDG 1 AND 4	405.00	0.1950	0	None Detec	cted		0.0049	<5.10	<0.0049
030930743-0003	'									
AH-A-A4	PERIMETER DOWNWIND BTWN BLDG 1 AND 4	405.00	0.1950	0	None Detec	eted		0.0049	<5.10	<0.0049
030930743-0004										
AH-A-P1	PERSONAL AIR MONITORING	345.00	0.2340	0	None Detec	ted		0.0048	<4.30	<0.0048
030930743-0005										
AH-A-P2	PERSONAL AIR MONITORING	339.00	0.2340	17	Amosite	0	2	0.0049	8.50	0.0097
030930743-0006	,									
AH-A-P3	PERSONAL AIR MONITORING	327.00	0.2470	1	Amosite	1	1	0.0048	8.10	0.0095
030930743-0007										•

Analyst(s)

David Chen (3)

Evie Sioukri (5)

James Hall, Laboratory Manager or other approved signatory

The laboratory is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. This lab is only responsible for data reported in structures/mm². This report may not be reproduced, except in full, without written approval by EMSL. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the samples reported above. Quality control data (including 95% confidence limits and laboratory and analysts' accuracy and precision) is available upon request. As per 40 CFR 763, the initial screening test may not be applied to samples with collected volumes of <1200 liters. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Samples analyzed by EMSL Analytical, Inc. New York 307 West 38th Street, New York NY NVLAP Lab Code 101048-9, AIHA IHLAP 102581, NYS ELAP 11506, CT PH-0170, MA

Test Report TEMAHERAver1-7.12.0 Printed: 12/10/2009 8:21:38 PM



Fax:

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Fax: (212) 290-0058 Email: manhattanlab@emsl.com Phone: (212) 290-0051

Attn: AECOM Technical Services, Inc.

4840 Cox Road

Richmond, VA 23060

(804) 515-8305

Phone: (804) 515-8300

Project: 60134596/ HELLER HEAT TREATING/ NJ

Customer ID:

Customer PO:

Received:

12/10/09 10:02 AM

EMSL Order:

030930743

EMSL Proj:

Analysis Date:

12/10/2009

EART59

Sampling Date:

12/8/2009

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm²)	Non Asb	Asbestos Type(s)	# Structui ≥ 0.5μ < 5μ	res ≥5µ	Analytical Sensitivity (S/cc)	Asbes Concent (S/mm²)	
AH-A-P4	PERSONAL AIR MONITORING	333.00	0.2340	2	Amosite	0	1	0.0049	4.30	0.0049
030930743-0008										

Analyst(s)

David Chen (3) Evie Sioukri (5)

James Hall, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. New York 307 West 38th Street, New York NY NVLAP Lab Code 101048-9, AlHA IHLAP 102581, NYS ELAP 11506, CT PH-0170, MA

REGION II RST 2 ANALYTICAL SERVICES REQUEST FORM

Tio:	Anthony T Helen Eng								
From:		Cris D/C	Onofiio .		, osc:				
Date:	2:-Dec-09								
Site Name::	Alfred Heller Heat Tireating Company			ny [,]	Date of Request:	Dec-09 ¹			
Site Location:	Clifton, NU				Anticipated Sampling Date:	1 2/09/2009 to: 1 2/1 8/2009			
					Anticipated Shipping Date:	1/2/09/2009	009		
SSID No.:	A213				Turnaround Time:	Verbal:	2-week		
Site TDD No.:	TO-001 3-01 29			 .	Written:	3-week			
RST 2 Task No.:	31/25				Saturday Delivery (Y/N)		N'o _'		
CLP Lab Requested		YES://NO	Yes		DESA Lab Requested:	YES://NO	Yes		
		ary deal service	Le and/or (around time: (OSC Only)	· · · · · · · · · · · · · · · · · · ·			
						,			
EPA.OSC Signature:									
No. of Samples	Sample 1	ype / Matrix	1 -	Ana	lysis Required	QA /QC Required	Unit Cost	Analysis Cost	
4		Soill	Hexavalent Chromium via SW 846 Method 7196A			Definitive Data			
2:	Aqueous		Hexavalent Chromium via SW 846 Method 7196A			Definitive Data			
11	Soili-MS/MSD		Hexavalent Chromium via SW/846 Method 7196A			Definitive Data			
				····					
								i i	
					Total Analytical Cost:		\$;		
			·	Date of					
Name of Laboratory		Contact		Request	Date Reply Requested	Date of Reply Total TDI		DD Cost	
						•			
PST 2 Analytical Con-	edinator.	P	ita. Cumb - t		· · · · · · · · · · · · · · · · · · ·	<u>i</u>	<u> </u>		
RST 2 Analytical Coordinator:		Smita Sumbaly			·	,			
RST 2 SPM: Analytical Services TDD#:		Sayed liqball							
- analyacan centices if				Task#:_	<u> </u>	ı.			